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EXAMINER	
PARTON, KEVIN S	

ART UNIT	PAPER NUMBER
2153	5

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/641,045	HARPER, KENNETH LEE
	Examiner	Art Unit
	Kevin Parton	2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 August 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 08/14/2003 have been fully considered but they are not persuasive. Please see the following reasons and the grounds of rejection below.

2. Applicant argues "In rejecting claim 1...other independent claims" (page 18, paragraph 4 – page 19, paragraph 1). The argument is not persuasive because in column 10, lines 25-31, Dawson (USPN 5,390,188) clearly points out that the source of a packet is considered in the metric. Further, all packets are directed to a destination, so the reference necessarily determines a point of loss between a source and a destination.

3. Applicant further argues "There is also...least these reasons" (page 19, paragraph 2). The argument is not persuasive because the claim as currently written does not clearly specify these limitations. Nothing in the claim language precludes the implementation on a ring network. As stated above, all packets are directed from a source to a destination, and a point of loss is determined.

4. Applicant further argues "The Office Action...these additional reasons" (page 19, paragraph 19). The argument is not persuasive because in a ring network, the topology of the network is determined just based on the number of nodes. When a source sends a packet to a destination, the topology is determined in transit and the loss metric is determined in transit. Further, in the case of a ring network, the point of loss is known in part because of the determined topology of the network.

5. Applicant further argues "In rejecting claim 16...these additional reasons" (page 20, paragraph 1). The argument is not persuasive for the same reasons shown above. The topology

of the ring network as well as the reporting of each port is required in the determination of a point of loss. Further, since the port logic knows the status of a packet entering and exiting and the source and destination of the packet, a memory is inherent as this information must be stored. Additionally, the reference teaches the calculation of a loss metric for both a source and a target address, so some level of topology must be storable on the port. Finally, as noted in the abstract, the metrics sent include a number of packets lost at that node.

6. Applicant further argues "As an initial matter...these additional reasons" (page 21, paragraph 2). The argument is not persuasive because by determining a loss at each port, a first hop and a next hop are necessarily considered. The incoming packet is the first hop and the outgoing is the next.

7. Applicant further argues "In addition, the...the Office Action" (page 21, paragraph 3 – page 22, paragraph 1). The argument is not persuasive because the secondary reference of Faigon et al. (USPN 6,006,016) teaches the identification of a fault point (point of loss) by utilizing a threshold value for the number of occurrences that can take place. This combined with Dawson (USPN 5,390,188) as shown below renders the claims obvious.

8. Applicant further argues "Claim 5 is...the recitation therein" (page 22, paragraph 2). The argument is not persuasive because the limitation "tracking of data records from a particular source to a particular destination from the source to the destination through an architecture that may include alternate pathways" is not expressly included in the claim language. Nothing in the claims precludes the use of a ring network as shown in the reference.

9. Applicant further argues "Claim 7 recites...these additional reasons" (page 22, paragraph 3 – page 23, paragraph 1). The argument is not persuasive because the data is in transit from the

time it is generated at the source machine. There may be changes introduced in the source machine after the data has been put "in transit" by the source application. These changes would be compensated for by the system. This could include encryption or other changes that may affect data record count.

10. Applicant further argues "Similarly, claim 8...Section 103 rejection" (page 23, paragraph 2 – page 24, paragraph 1). The argument is not persuasive because the secondary reference is used to show the common feature of encryption in the art. It is also well known that some types of encryption may alter a "record count" by inserting additional non-data packets used for decryption or by expanding the size of an incoming data record.

11. Finally, applicant argues "Claim 9 is...these additional reasons" (page 24, paragraph 2). The argument is not persuasive because the Beigi et al. (USPN 6,363,056) reference teaches the use of a timer within a probe packet. This information can be used to determine delays and in combination with a system such as Dawson (USPN 5,390,188). The timer would allow delay information between any hops to be calculated. The combination is repeated below with the associated motivation.

12. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1, 2, 16-21, 35, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Dawson (USPN 5,390,188).

15. Regarding claims 1, 20, and 35, Dawson (USPN 5,390,188) teaches a system for determining a point of loss for records to be communicated between a source and a destination on a communications network with means for:

a. Determining a topology of the communication network between the source and the destination, the topology including a plurality of connecting nodes (figure 1). Note that in the reference, the topology is known by all nodes.

b. Monitoring a number of data records from the source directed to the destination passing between ones of the connecting nodes during a determined period of time (column 10, lines 1-13; column 14, lines 58-62).

c. Identifying at least one of the connecting nodes as the point of loss based on the monitored number of data records and the determined topology (column 10, lines 1-13; column 14, lines 58-62).

16. Regarding claims 2, 21, and 36 Dawson (USPN 5,390,188) teaches all the limitations as applied to claims 1, 20 and 35, respectively. He further teaches means wherein a plurality of network appliances configured to obtain a number of data records passing between a pair of connecting nodes during a time period are positioned between respective ones of the connecting nodes, with means for:

a. Identifying at least one of the network appliances on the topology (figure 7; column 14, lines 58-62).

b. Obtaining the number of data records from the source directed to the destination obtained by the identified at least one network appliance during the determined period of time (column 14, lines 58-62; column 15, lines 35-38). Note that in the reference, the loss metrics are sent to management machines for each device.

17. Regarding claim 16, Dawson (USPN 5,390,188) teaches a system for determining point of loss for data records to be communicated between a source and a destination on a communication network comprising:

a. A memory including a topology of the communication network between the source and the destination, the topology including a plurality of connecting nodes (figure 1). Note that in the reference, the topology is known by all nodes.

b. A receiver that receives from a plurality of network appliances at determined locations on the communication network a number of data records from the source directed to the destination passing between ones of the connecting nodes during a determined period of time (column 10, lines 1-13; column 14, lines 58-62).

c. A comparison circuit that identifies at least one of the connecting nodes as the point of loss based on the received number of data records, the locations of the network appliances and the topology (column 10, lines 1-13, 26-32).

18. Regarding claim 17, Dawson (USPN 5,390,188) teaches all the limitations as applied to claim 16. He further teaches means wherein pairs of the connecting nodes define segments of the topology between the source and the destination and wherein at least one of the network appliances is coupled between each of the pairs of the connecting nodes (figure 1; figure 9).

19. Regarding claim 18, Dawson (USPN 5,390,188) teaches all the limitations as applied to claim 17. He further teaches:

a. A timer (column 14, lines 58-62).

b. A filter that identifies ones of a plurality of data records detected by the at least one of the network appliances that are being transmitted from the source to the destination on the communications network (column 10, lines 1-13).

c. A counter that counts filtered one of the plurality of data records, the counter being configured to be reset responsive to the timer; and a transmitter that transmits counts from the counter to the receiver (column 14, lines 58-62; column 15, lines 35-47)

20. Regarding claim 19, Dawson (USPN 5,390,188) teaches all the limitations as applied to claim 17. He further teaches means wherein the filter is configured to identify ones of the plurality of data records based on the source Internet Protocol (IP) address and destination IP address of a data packet containing data records detected by the at least one of the network appliances (figure 1, figure 9; column 10, lines 1-13). Note that all packets are filtered based on the destination address.

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

22. Claims 3-8, 13-15, 22-27, 32-34, 37-42, and 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dawson (USPN 5,390,188) in view of Faigon et al. (USPN 6,006,016).

23. Regarding claims 3, 22, and 37, Dawson (USPN 5,390,188) teaches all the limitations as applied to claims 2, 21, and 36, respectively. He further teaches means for:

a. Identifying at least one first hop one of the network appliances which is coupled to the source over the communication network (column 15, lines 35-47). Note that each device is polled for data at some point.

b. Identifying at least one next hop one of the network appliances which is coupled between the at least one first hop one of the network appliances and the destination (column 15, lines 15-47). Note that an individual device returns data for the hope before and after it.

c. Obtaining a number of data records from the source directed to the destination obtained by the at least one first hop one of the network appliances and the at least one next hop one of the network appliances during the determined time period (column 10, lines 1-13; column 14, lines 58-63).

Wherein the step of identifying at least one of the connecting nodes as the point of loss further comprises the steps of:

d. Comparing the number of data records from the source directed to the destination obtained by one of the at least one first hop one of the network appliances with the number of data records from the source directed to the destination obtained by ones of the at least one next hop one of the network appliances coupled between the one of the at least one first hop one of the network appliances and the destination (column 10, lines 26-31).

e. Identifying a connecting node positioned between the at least one first hop one of the network appliances and the ones of the at least one next hop one of the network appliances as the point of loss for data records (column 10, lines 1-13, 26-32; abstract).

Although the system disclosed by Dawson (USPN 5,390,188) shows substantial features of the claimed invention, it fails to disclose means for identifying a fault if the number of data records from the source directed to the destination obtained by one of the at least one first hop one of the network appliances differs by a threshold amount from the number of data records from the source directed to the destination obtained by ones of the at least one next hop one of the network appliances coupled between the one of the at least one first hop one of the network appliances and the destination.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Dawson (USPN 5,390,188), as evidenced by Faigon et al. (USPN 6,006,016).

In an analogous art, Faigon et al. (USPN 6,006,016) discloses a system for fault isolation wherein identifying a fault if the number of data records from the source directed to the

destination obtained by one of the at least one first hop one of the network appliances differs by a threshold amount from the number of data records from the source directed to the destination obtained by ones of the at least one next hop one of the network appliances coupled between the one of the at least one first hop one of the network appliances and the destination (abstract; figure 15). Note that the reference shows the use of a threshold in determining the existence of a fault.

Given the teaching of Faigon et al. (USPN 6,006,016), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Dawson (USPN 5,390,188) by employing the use of a threshold to define when a network element is determined to be a point of loss. This benefits the system by allowing for a level of resolution to be set in determining the point of loss. If the data being sent is low priority, setting a high threshold would save administrator time while still enduring a level of service.

24. Regarding claims 4, 23, and 38 Dawson (USPN 5,390,188) teaches all the limitations as applied to claims 3, 22, and 37, respectively. He further teaches means wherein the at least one first hop one of the network appliances is coupled to the source without intervening ones of the network appliances being coupled between the source and the first hop one of the network appliances and wherein the at least one next hop one of the network appliances is coupled between the at least one first hop one of the network appliances and the destination without intervening ones of the network appliances being coupled between the at least one first hop one of the network appliances and the at least one next hop one of the network appliances (figure 9). Note that the packet detector appliance is always connected to the incoming line and to the line going to the destination.

25. Regarding claims 5, 24, and 39, Dawson (USPN 5,390,188) teaches all the limitations as applied to claims 3, 22, and 37. He further teaches means wherein the step of comparing the number of data records from the source directed to the destination obtained by one of the at least one first hop one of the network appliances with the number of data records from the source directed to the destination obtained by ones of the at least one next hop one of the network appliances coupled between the one of the at least one first hop one of the network appliances and the destination further comprises the step of comparing a number of data records from the source directed to the destination obtained by an upstream one of the network appliances with a number of data records from the source directed to the destination obtained by at least one downstream one of the network appliances coupled between the upstream one of the network appliances and the destination at an adjacent downstream position for successive ones of the network appliances until at least one of the destination is reached or at least one of the connecting nodes is identified as the point of loss for data records and wherein the step of identifying a connecting node positioned between the at least one first hop one of the network appliances and the ones of the at least one next hop one of the network appliances as the point of loss for data records comprises the step of identifying a connecting node positioned between the upstream one of the network appliances and corresponding downstream ones of the network appliances as the point of loss for data records if the number of data records from the source directed to the destination obtained by the upstream one of the network appliances differs from the number of data records from the source directed to the destination obtained by the corresponding downstream ones of the network appliances (column 10, lines 1-13, 26-32; column 14, lines 58-62; column 15, lines 35-38).

Although the system disclosed by Dawson (USPN 5,390,188) shows substantial features of the claimed invention, it fails to disclose means wherein the number of lost records is compared to a threshold value.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Dawson (USPN 5,390,188), as evidenced by Faigon et al. (USPN 6,006,016).

In an analogous art, Faigon et al. (USPN 6,006,016) discloses a system for fault isolation wherein the number of lost records, or faults, is compared to a threshold value (abstract; figure 15). Note that the reference shows the use of a threshold in determining the existence of a fault.

Given the teaching of Faigon et al. (USPN 6,006,016), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Dawson (USPN 5,390,188) by employing the use of a threshold to define when a network element is determined to be a point of loss. This benefits the system by allowing for a level of resolution to be set in determining the point of loss. If the data being sent is low priority, setting a high threshold would save administrator time while still enduring a level of service.

26. Regarding claims 6, 25, and 40, Dawson (USPN 5,390,188) teaches all the limitations as applied to claims 5, 24, and 39, respectively. He further teaches means wherein the step of comparing a number of data records from the source directed to the destination obtained by an upstream one of the network appliances with a number of data records from the source directed to the destination obtained by at least one downstream one of the network appliances coupled between the upstream one of the network appliances and the destination at an adjacent downstream position is repeated for successive ones of the network appliances on the topology

until the destination is reached and wherein the step of identifying at least one of the connecting nodes as the point of loss further comprises the step of identifying all connecting nodes positioned between upstream ones of the network appliances and corresponding downstream ones of the network appliances as points of loss for data records if the number of data records from the source directed to the destination obtained by respective upstream ones of the network appliances differs from the number of data records from the source directed to the destination obtained by corresponding downstream ones of the network appliances (column 10, lines 1-13, 26-32; column 14, lines 58-62; column 15, lines 35-38). Note that in the reference, the ring network does the comparison for each device.

Although the system disclosed by Dawson (USPN 5,390,188) shows substantial features of the claimed invention, it fails to disclose means wherein the number of lost records is compared to a threshold value.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Dawson (USPN 5,390,188), as evidenced by Faigon et al. (USPN 6,006,016).

In an analogous art, Faigon et al. (USPN 6,006,016) discloses a system for fault isolation wherein the number of lost records, or faults, is compared to a threshold value (abstract; figure 15). Note that the reference shows the use of a threshold in determining the existence of a fault.

Given the teaching of Faigon et al. (USPN 6,006,016), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Dawson (USPN 5,390,188) by employing the use of a threshold to define when a network element is determined to be a point of loss. This benefits the system by allowing for a level of resolution to

be set in determining the point of loss. If the data being sent is low priority, setting a high threshold would save administrator time while still enduring a level of service.

27. Regarding claims 7, 26, and 41, Dawson (USPN 5,390,188) teaches all the limitations as applied to claim 3, 22, and 37, respectively. He further teaches means for adjusting obtained numbers of data records from the source directed to the destination to compensate for in transit introduced changes to data records before comparing the number of data records from the source directed to the destination obtained by one of the at least one first hop one of the network appliances with the number of data records from the source directed to the destination obtained by one of the at least one next hop one of the network appliances coupled between the one of the at least one hop one of the network appliances and the destination (column 15, lines 27-31).

28. Regarding claims 8, 27, and 42, Dawson (USPN 5,390,188) teaches all the limitations as applied to claims 7, 26, and 41, respectively. He further teaches means for adjusting obtained numbers of data records comprises the step of adjusting obtained numbers of data records from the source directed to the destination to compensate for encryption related changes in data records introduced by a connecting node coupled between the a first hop one and at least one next hop one of the network appliances (column 15, lines 27-31).

Although the system disclosed by Dawson (USPN 5,390,188) shows substantial features of the claimed invention, it fails to disclose means wherein the changes are the result of encryption.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Dawson (USPN 5,390,188).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Dawson (USPN 5,390,188) by compensating specifically for packets that are encrypted while being used by a node. This encryption would make the packet unrecognizable as the same piece of data. Compensating for this would benefit the system by avoiding the labeling of a node as a point of loss and using administrator time when in fact the result is due to the encryption of packets.

29. Regarding claims 13, 32, and 47, Dawson (USPN 5,390,188) teaches all the limitations as applied to claims 3, 22, and 37, respectively. He further teaches means wherein the connecting nodes are routing devices selected from the group consisting of routers, bridges, and switches (column 18, lines 7-13).

30. Regarding claims 14, 33, and 48, Dawson (USPN 5,390,188) teaches all the limitations as applied to claims 3, 22, and 37, respectively. He further teaches means wherein a network appliance is positioned between each defined connecting node in the topology and all other adjacent defined connecting nodes in the topology (figure 9, elements 210 and 230).

31. Regarding claims 15, 34, and 49, Dawson (USPN 5,390,188) teaches all the limitations as applied to claims 14, 33, and 48, respectively. He further teaches means wherein at least one of the defined connecting nodes comprises a plurality of routing devices (figure 1; abstract). Note that in a ring network, each node routes messages to the next.

32. Claims 9-12, 28-31, and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dawson (USPN 5,390,188) in view of Faigon et al. (USPN 6,006,016) as applied to claims 3 above, and further in view of Beigi et al. (USPN 6,363,056).

33. Regarding claims 9, 28, and 43, although the system disclosed by Dawson (USPN 5,390,188) and Faigon et al. (USPN 6,006,016) (as applied to claims 3, 22, and 37, respectively) shows substantial features of the claimed invention, it fails to disclose means for defining the determined period of time for the at least one first hop one of the network appliances and the at least next hop one of the network appliances based on a delay between the at least one first hop one of the network appliances and the at least next hop one of the network appliances.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Dawson (USPN 5,390,188) and Faigon et al. (USPN 6,006,016), as evidenced by Beigi et al. (USPN 6,363,056).

In an analogous art, Beigi et al. (USPN 6,363,056) discloses a system for the monitoring of networked devices with means for defining the determined period of time for the at least one first hop one of the network appliances and the at least next hop one of the network appliances based on a delay between the at least one first hop one of the network appliances and the at least next hop one of the network appliances (abstract; figure 6).

Given the teaching of Beigi et al. (USPN 6,363,056), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Dawson (USPN 5,390,188) and Faigon et al. (USPN 6,006,016) by employing the determination of a standard delay for packets on the network. This benefits the system by allowing for a timer that will determine when a packet is lost based on the general network performance.

34. Regarding claims 10, 29, and 44, although the system disclosed by Dawson (USPN 5,390,188) and Faigon et al. (USPN 6,006,016) (as applied to claims 9, 28, and 43, respectively) shows substantial features of the claimed invention, it fails to disclose means wherein defining

the determined time period further comprises the step of defining the determined period of time for the at least one first hop one of the network appliances and the at least next hop one of the network appliances based on an average delay between the at least one first hop one of the network appliances and the at least next hop one of the network appliances determined over an averaging window.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Dawson (USPN 5,390,188) and Faigon et al. (USPN 6,006,016), as evidenced by Beigi et al. (USPN 6,363,056).

In an analogous art, Beigi et al. (USPN 6,363,056) discloses a system for the monitoring of networked devices with means wherein defining the determined time period further comprises the step of defining the determined period of time for the at least one first hop one of the network appliances and the at least next hop one of the network appliances based on an average delay between the at least one first hop one of the network appliances and the at least next hop one of the network appliances determined over an averaging window (abstract; figure 6; figure 7, element 715).

Given the teaching of Beigi et al. (USPN 6,363,056), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Dawson (USPN 5,390,188) and Faigon et al. (USPN 6,006,016) by employing the determination of a standard delay for packets on the network. This benefits the system by allowing for a timer that will determine when a packet is lost based on the general network performance.

35. Regarding claims 11, 30, and 45, although the system disclosed by Dawson (USPN 5,390,188) and Faigon et al. (USPN 6,006,016) (as applied to claims 3, 22, and 37, respectively)

shows substantial features of the claimed invention, it fails to disclose means for defining the threshold amount based on an expected timing related variability between numbers of data records obtained by ones of the network appliances.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Dawson (USPN 5,390,188) and Faigon et al. (USPN 6,006,016), as evidenced by Beigi et al. (USPN 6,363,056).

In an analogous art, Beigi et al. (USPN 6,363,056) discloses a system for the monitoring of networked devices with means for defining the threshold amount based on an expected timing related variability between numbers of data records obtained by ones of the network appliances (abstract; figure 6; figure 7, element 715). Note that in the reference, timing is based on an average and this is a threshold for how long should be allowed between packets.

Given the teaching of Beigi et al. (USPN 6,363,056), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Dawson (USPN 5,390,188) and Faigon et al. (USPN 6,006,016) by employing the determination of a standard delay for packets on the network. This benefits the system by allowing for a timer that will determine when a packet is lost based on the general network performance.

36. Regarding claims 12, 31, and 46, although the system disclosed by Dawson (USPN 5,390,188) and Faigon et al. (USPN 6,006,016) (as applied to claims 11, 30, and 45, respectively) shows substantial features of the claimed invention, it fails to disclose means wherein the step of defining the threshold amount further comprises the step of defining the threshold amount based on a percentage of data record throughput for respective ones of the network appliances.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Dawson (USPN 5,390,188) and Faigon et al. (USPN 6,006,016).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Dawson (USPN 5,390,188) and Faigon et al. (USPN 6,006,016) by employing the use of a percentage of records in defining the threshold. Note that the Faigon et al. (USPN 6,006,016) reference teaches the use of a number of occurrences to define a fault. Using a percentage would benefit the system by allowing for times of high traffic when a higher incidence of lost data may be expected and should not specify a point of loss.

Conclusion

37. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Parton whose telephone number is (703)306-0543. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703)305-4792. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Kevin Parton
Examiner
Art Unit 2153

ksp

Dung C. Dinh
Primary Examiner